

REMARKS

Upon entry of the present amendment, claims 1-12 will remain pending in the above-identified application and stand ready for further action on the merits. The amendments made herein to the claims do not incorporate new matter into the application as originally filed. For example, claim 7 has been amended, in part, to change the word "obtainable" to "obtained". Further, each of claims 1-12 have been amended to change the term "homogeneous type solid catalyst component or a homogeneous type solid catalyst" to "solid catalyst component for a transition metal complex or a solid catalyst containing a transition metal complex". Support for these latter amendments to the claims occurs in the original filed application at page 49, line 6, to page 104, line 29.

Accordingly, entry of the present amendment is respectfully requested.

Claim Objections

Claim 7 was previously objected to based upon the use of the word "obtainable" therein. Claim 7 has been amended to change the word "obtainable" to "obtained". This amendment does not alter the scope of the claim.

Claim Rejections Under 35 USC § 112

Claims 1-10 have been rejected under 35 USC § 112, second paragraph, based upon the use of the phrase "homogeneous type" therein. While Applicants do not agree with the Examiner's objection to the term "homogeneous type", and agree that they may be their own lexicographer, they have nonetheless amended each of claims 1-12 to remove the phrase "homogeneous type" therefrom. It is believed that the amendment does not alter the scope of the claims, and at the same time particularly and distinctly sets forth the invention, which Applicants regard as their own. Accordingly, withdrawal of the outstanding rejection under 35 USC § 112, second paragraph is required.

Claim Rejections Under 35 USC § 103

Claims 1-12 have been rejected under 35 USC § 103(a) over Ushioda et al. '528 (US 6,344,528), and claims 1-4 and 9-12 have been rejected under the same statute over Smith '406 (US 6,054,406). Reconsideration and withdrawal of each of these rejections is requested based upon the following considerations.

Solid-Separating Methods Disclosed in the Cited Prior Art

First, the '528 patent mentions as follows at column 12, lines 21-24:

Thereafter, the reaction mixture was allowed to stand for a while, it separated into a supernatant and precipitates. After the supernatant was removed, the precipitates were washed with toluene twice. (emphasis added)

Second, the '406 patent mentions as follows at column 8, lines 43-48:

The reaction mixture was maintained under those conditions for 90 minutes. At the end of this period, stirring was stopped and the solids were allowed to settle for approximately 20 minutes at 100°C. The supernatant liquid was removed and the solids were washed five times with 50 ml portions of methylene chloride at 30°C. (emphasis added)

Based on the above teachings, it can easily be understood that the precipitates (in case of '406 patent, "solids") contain a fine-powdery component and/or a shapeless component, too, because the precipitates are washed after the supernatant and the precipitates are completely separated from each other. Incidentally, the word "supernatant" is defined as "a liquid forming a clear layer above a precipitate produced from a solution of the liquid" [Hawley's Condensed Chemical Dictionary, Twelfth Edition, revised by Richard J. Lewis, Sr. (Van Nostrand Reinhold Company - New York)]. According to this definition, since a supernatant is clear, it can easily be understood that a supernatant does not contain any solid material such as a fine powdery component and a shapeless component.

Solid-Separating Method of the Present Invention

The solid catalyst component or the solid catalyst in the present invention does not contain a fine-powdery component and/or a shapeless component, because the fine-powdery component and/or the shapeless component contained in a slurry are removed utilizing a difference between their sedimentation velocities in a solvent. Here, the phrase "difference between their sedimentation velocities in a solvent" means a difference between:

(i) the sedimentation velocity of the fine-powdery component and/or the shapeless component contained in the slurry, which velocity is slower than the below-mentioned velocity, and

(ii) the sedimentation velocity of the solids other than the fine-powdery component and/or the shapeless component contained in the slurry, which velocity is faster than the above-mentioned velocity.

Namely, the fine-powdery component and/or the shapeless component contained in the slurry are removed intentionally in the present invention, which intentional removing is not disclosed in the cited prior arts.

Since the present invention utilizes the above-mentioned difference between the both sedimentation velocities, the present invention has the following advantageous effects:

(i) an additional apparatus for separating the fine-powdery component and/or the shapeless component is not necessary,

(ii) the above-mentioned separation method can be easily carried out, and is economical (i.e., it is not costly),

(iii) a solid catalyst component or a solid catalyst having a narrow particle size distribution can be obtained, and

(iv) a polymer having a narrow particle size distribution can be obtained.

Accordingly, based upon the above considerations, it is clear that the cited art does not teach, or otherwise provide for a process as instantly claimed, and at the same time does not render obvious the fact that unexpected and advantageous results are achieved with the instant invention.

Reconsideration and withdrawal of each of the outstanding rejections under 35 USC § 103(a) is required at present.

CONCLUSION

Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that each of the pending claims 1-12 are allowable at present.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully

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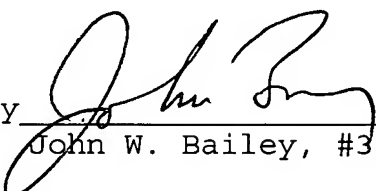
requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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